WO 2004/043640 PCT/FI2003/000858

6

Patent claims:

5

10

15

20

25

- 1. A filler wire guide tube for guiding a filler wire, the base material of the wire guide tube being plastic, **characterized** in that in the cross section of the wire guide tube is formed by an inner region containing a particulate additive comprising at least polytetrafluoroethylene (PTFE) and an outer layer not blended with such an additive.
- 2. The filler wire guide of patent claim 1, characterized in that the additive composition includes particulate silicon.

3. The filler wire guide of patent claim 1 or 2, characterized in that the amount of the additive composition is about 12-20 % in the weight of the additive containing region, and the additive composition comprises polytetrafluoroethylene (PTFE) by about 12-17 wt. % and silicon by about 1-3 wt. %.

4. The filler wire guide of any one of patent claims 1 - 3, characterized in that the thickness of the additive containing region is 200 - 500 μm .

- 5. The filler wire guide of any one of patent claims 1 4, characterized in that the base material of the wire guide tube is high-density polyethylene (HDPE).
- 6. The filler wire guide of any one of patent claims 1 5, characterized in that the wire guide inner diameter is in the range of 2 4 mm and the outer diameter in the range of 4 7 mm.

7. The filler wire guide of any one of patent claims 1 - 6, characterized in that the additive composition includes molybdene sulfide.